

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: **Janakiraman et al.** §

Serial No. **09/842,835** §

Filed: **April 26, 2001** §

For: **Apparatus for Outputting Textual
Renditions of Graphical Data and
Method Therefor** §

Group Art Unit: **2179**

Examiner: **Theriault, Steven B.**

Commissioner for Patents
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35525
PATENT TRADEMARK OFFICE
CUSTOMER NUMBER

APPEAL BRIEF (37 C.F.R. 41.37)

This brief is in furtherance of the Reinstatement of Appeal, filed in this case on September 20, 2006.

No additional fees are believed to be necessary. If, however, any additional fees are required, I authorize the Commissioner to charge these fees which may be required to IBM Corporation Deposit Account No. 09-0447. No extension of time is believed to be necessary. If, however, an extension of time is required, the extension is requested, and I authorize the Commissioner to charge any fees for this extension to IBM Corporation Deposit Account No. 09-0447.

REAL PARTY IN INTEREST

The real party in interest in this appeal is the following party: International Business Machines Corporation of Armonk, New York.

RELATED APPEALS AND INTERFERENCES

With respect to other appeals or interferences that will directly affect, or be directly affected by, or have a bearing on the Board's decision in the pending appeal, a previous appeal pursuant to notice of appeal filed by Applicants/Appellants on December 21, 2005 is pending and is reinstated by the reinstatement of appeal filed on September 20, 2006.

STATUS OF CLAIMS

A. TOTAL NUMBER OF CLAIMS IN APPLICATION

Claims in the application are: 1-33

B. STATUS OF ALL THE CLAIMS IN APPLICATION

Claims canceled: NONE

Claims withdrawn from consideration but not canceled: NONE

Claims pending: 1-33

Claims allowed: NONE

Claims rejected: 1-33

Claims objected to: NONE

C. CLAIMS ON APPEAL

The claims on appeal are: 1-33

STATUS OF AMENDMENTS

An amendment after final rejection was not filed. Therefore, Claims 1-33 on appeal herein are as amended in the Response to Office Action filed July 1, 2005.

SUMMARY OF CLAIMED SUBJECT MATTER

A. CLAIM 1 - INDEPENDENT

Claim 1 is directed to a method in a data processing system for presenting graphical data to a user. A set of graphical data is analyzed to determine a set of critical factors present in the graphical data to form determined critical factors (Specification, pg. 10, line 6 – pg. 11, line 14; Figure 3, step 310, Figure 7). The determined critical factors are ranked according to respective priorities set for each of the critical factors (Specification, pg. 9, line 16 – pg. 10, line 9; Figure 3, step 308, Figures 5A and 5B). Then, a textual description of the set of graphical data, ordered according to the priorities of each of the respective critical factors, is generated (Specification, pg. 12, line 7 – pg. 13, line 8; Figure 3, step 312).

B. CLAIM 8 – INDEPENDENT

Claim 8 is directed to a computer program product for presenting graphical data to a user. The computer program product includes a set of instructions for performing the step of analyzing a set of graphical data to determine a set of critical factors present in the graphical data to form determined critical factors (Specification, pg. 10, line 6 – pg. 11, line 14; **Figure 3, step 310, Figure 7**). The computer program product also includes a set of instructions for performing the step of ranking the determined critical factors according to respective priorities set for each of the critical factors (Specification, pg. 9, line 16 – pg. 10, line 9; **Figure 3, step 308, Figures 5A and 5B**). The computer program product also includes a set of instructions for performing the step of generating a textual description of the set of graphical data, ordered according to the priorities of each of the respective critical factors (Specification, pg. 12, line 7 – pg. 13, line 8; **Figure 3, step 312**).

C. CLAIM 15 - INDEPENDENT

Claim 15 is directed to a data processing system. The data processing system has circuitry (**Figure 2, 210, 212, 214, and 216**) operable for analyzing a set of graphical data to determine a set of critical factors present in the graphical data to form determined critical factors

(Specification, pg. 10, line 6 – pg. 11, line 14; **Figure 3, step 310, Figure 7**). The data processing system has circuitry (**Figure 2, 210, 212, 214, and 216**) operable for ranking the determined critical factors according to respective priorities set for each of the critical factors (Specification, pg. 9, line 16 – pg. 10, line 9; **Figure 3, step 308, Figures 5A and 5B**). The data processing system has circuitry (**Figure 2, 210, 212, 214, and 216**) operable for generating a textual description of the set of graphical data, ordered according to the priorities of each of the respective critical factors (Specification, pg. 12, line 7 – pg. 13, line 8; **Figure 3, step 312**).

D. CLAIM 2 - DEPENDENT

Claim 2 is directed to a method in a data processing system for presenting graphical data to a user, using the same method as recited in claim 1, wherein the set of critical factors and the textual description are selected according to a selected mode (Specification, pg. 9, line 16 – pg. 10, line 9; **Figure 3, step 308, Figures 5A and 5B**).

E. CLAIM 4 - DEPENDENT

Claim 4 is directed to a method in a data processing system for presenting graphical data to a user, using the same method as recited in claim 1, wherein the textual description is further rendered in an aural format (Specification, pg. 7, lines 9-21; **Figure 2 ref. num. 228, Figure 3 step 308**).

F. CLAIM 5 - DEPENDENT

Claim 5 is directed to a method in a data processing system for presenting graphical data to a user, using the same method as recited in claim 1, wherein the textual description is further rendered in a tactile format (Specification, pg. 7, lines 9-21; **Figure 2 ref. num. 242, Figure 3 step 308**).

G. CLAIM 9 - DEPENDENT

Claim 9 is directed to a computer program product for presenting graphical data to a user, using the same computer program product as recited in claim 8, wherein the set of critical factors and the textual description are selected according to a selected mode (Specification, pg. 9, line 16 – pg. 10, line 9; **Figure 3, step 308, Figures 5A and 5B**).

H. CLAIM 11 - DEPENDENT

Claim 11 is directed to a computer program product for presenting graphical data to a user, using the same computer program product as recited in claim 8, wherein the textual description is further rendered in an aural format (Specification, pg. 7, lines 9-21; **Figure 2** ref. num. 228, **Figure 3** step 308).

I. CLAIM 12 - DEPENDENT

Claim 12 is directed to a computer program product for presenting graphical data to a user, using the same computer program product as recited in claim 8, wherein the textual description is further rendered in a tactile format (Specification, pg. 7, lines 9-21; **Figure 2** ref. num. 242, **Figure 3** step 308).

J. CLAIM 16 - DEPENDENT

Claim 16 is directed to a data processing system for presenting graphical data to a user, using the same data processing system as recited in claim 15, wherein the set of critical factors and the textual description are selected according to a selected mode (Specification, pg. 9, line 16 – pg. 10, line 9; **Figure 3**, step 308, **Figures 5A** and **5B**).

K. CLAIM 18 - DEPENDENT

Claim 18 is directed to a data processing system for presenting graphical data to a user, using the same data processing system as recited in claim 15, wherein the textual description is further rendered in an aural format (Specification, pg. 7, lines 9-21; **Figure 2** ref. num. 228, **Figure 3** step 308).

L. CLAIM 19 - DEPENDENT

Claim 19 is directed to a data processing system for presenting graphical data to a user, using the same data processing system as recited in claim 15, wherein the textual description is further rendered in a tactile format (Specification, pg. 7, lines 9-21; **Figure 2** ref. num. 242, **Figure 3** step 308).

M. CLAIM 23 - DEPENDENT

Claim 23 is directed to a method in a data processing system for presenting graphical data to a user, using the same method as recited in claim 22, which uses the same method as recited in claim 1, wherein image analysis software is used for converting the textual description from the graphical data (Specification, pg. 9, lines 4-15).

N. CLAIM 27 - DEPENDENT

Claim 27 is directed to a computer program product for presenting graphical data to a user, using the same computer program product as recited in claim 8, wherein the graphical data is selected from a group of GIF, JPEG, and PNG type data formats (Specification, pg. 8, lines 27-28).

GROUND OF REJECTION TO BE REVIEWED ON APPEAL

A. GROUND OF REJECTION 1 (Claims 1-3, 6-10, 13-17, 20-22, 24-26, and 28-33)

Claims 1-3, 6-10, 13-17, 20-22, 24-26, and 28-33 stand rejected under 35 U.S.C. § 102(e) as being unpatentable over *Berckmans et al.*, Method and System for Analyzing and Comparing Financial Investments, United States Patent No. 6,876,981 B1 (April 5, 2005) (hereinafter "*Berckmans*").

B. GROUND OF REJECTION 2 (Claims 4-5, 11-12, 18-19, and 23)

Claims 4-5, 11-12, 18-19, and 23 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Berckmans et al.*, Method and System for Analyzing and Comparing Financial Investments, United States Patent No. 6,876,981 B1 (April 5, 2005) (hereinafter "*Berckmans*"), in view of the publication by *W3C et al.*, Web Content Accessibility Guideline 1.0, published May 5, 1999.

C. GROUND OF REJECTION 3 (Claim 27)

Claim 27 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over *Berckmans et al.*, Method and System for Analyzing and Comparing Financial Investments, United States Patent No. 6,876,981 B1 (April 5, 2005) (hereinafter "*Berckmans*"), in view of knowledge common to those of ordinary skill in the art.

ARGUMENT

A. GROUND OF REJECTION 1

A.1 Claims Group 1 of claims 1, 3, 6-8, 10, 13-15, 17, 20-22, 24-26, and 28-33

The Examiner has rejected claims 1-3, 6-10, 13-17, 20-22, 24-26, and 28-33 under 35 U.S.C. § 102(e) as being anticipated by *Berckmans et al.*, Method and System for Analyzing and Comparing Financial Investments, United States Patent No. 6,876,981 B1 (April 5, 2005) (hereinafter "*Berckmans*"). This rejection is respectfully traversed.

The Examiner has rejected these claims stating:

- In regard to **Independent claim 1**, Berckmans teaches a method for presenting graphical data to a user, comprising the steps of:
- Analyzing a set of graphical data to determine a set of critical factors present in the graphical data; (Berckmans column 5, lines 25-30 and figure 3) Berckmans shows the analyzing of stock information by the user where the user determines which critical factors related to stocks such as price, bid/ask, horizon, etc. are relative and which they want to see in the display
- Ranking the determined critical factors according to respective priorities set for each of the critical factors; (Berckmans Figure 3-9 and column 8, lines 50-67) Berckmans teaches the ability to set factors to determine certain outcomes where the settings comprise a ranking of stocks based on the settings to see if a particular investment strategy will transpire
- Generating a textual description of the set of graphical data, ordered according to the priority of the respective critical factor (Berckmans Figure 3) Berckmans shows the textual data generated in the display in which a textual description is placed on the data such as the company name or the call date as shown in figure 3. Also the data in the display is descriptive in that the user gleans from the data information about the particular securities in the display.

Final Office Action dated June 21, 2006, p. 3. (Emphasis in the original)

A prior art reference anticipates the claimed invention under 35 U.S.C. § 102 only if every element of a claimed invention is identically shown in that single reference, arranged as they are in the claims. *In re Bond*, 910 F.2d 831, 832, 15 U.S.P.Q.2d 1566, 1567 (Fed. Cir. 1990). All limitations of the claimed invention must be considered when determining patentability. *In re Lowry*, 32 F.3d 1579, 1582, 32 U.S.P.Q.2d 1031, 1034 (Fed. Cir. 1994).

Anticipation focuses on whether a claim reads on the product or process a prior art reference discloses, not on what the reference broadly teaches. *Kalman v. Kimberly-Clark Corp.*, 713 F.2d 760, 218 U.S.P.Q. 781 (Fed. Cir. 1983). In this case, each and every feature of the presently claimed invention is not identically shown in the cited reference, arranged as they are in the claims.

Claim 1 is representative of all claims in the group of claims 1-3, 6-10, 13-17, 20-22, 24-26, and 28-33. Claim 1 recites:

A method in a data processing system for presenting graphical data to a user, comprising the steps of:
analyzing a set of graphical data to determine a set of critical factors present in the graphical data to form determined critical factors;
ranking the determined critical factors according to respective priorities set for each of the critical factors; and
generating a textual description of the set of graphical data, ordered according to the priorities of each of the respective critical factors.

In the present case, each and every step in claim 1 is not shown in the cited reference. In particular, neither of the analyzing, ranking, and generating steps as recited in claim 1 are shown in the *Berckmans*.

As to the step of analyzing a set of graphical data to determine a set of critical factors present in the graphical data, the Examiner cites:

As further described and shown, the options screen 300 presents a high level of investing data to the client, while allowing the client to quickly and easily analyze and compare investment choices. The information displayed at the options screen 300 is considered real-time, meaning the data displayed is typically only minimally delayed as it passes from the financial exchanges 100 to the client 112 (see FIG. 1).

Berckmans, col. 5, ll. 25-31.

The above section cited by the Examiner is part of the detailed description of figure 3, which is reproduced below. In this section, *Berckmans* describes a screen layout used for presenting investment related information to a user. The information displayed on this screen is obtained in real time. The screen referenced in the cited section is as follows:

Berckmans teaches that the screen shows “options financial data” and can be used to show information about stocks, bonds, currencies, commodities, mutual funds and other financial instruments. The display area of the screen referenced by reference numeral 302 is shown to display alphanumeric information in figure 3. Furthermore, the other sections of the screen show controls that manipulate the computations surrounding the financial instrument whose information is displayed. The grayscale bars shown in the cells of the display section of the screen reflect the condition of the alphanumeric information displayed in that cell.

Berckmans does not teach in the entire disclosure that the core information in the cells of screen 300 is graphical or could be graphical. The bars displayed in the cells are only described as being dependent on, and reflective of, the core alphanumeric information, and not as being substantive financial information of interest in themselves. Based on this disclosure, *Berckmans* teaches that the information displayed on screen 300 is alphanumeric. *Berckmans* also teaches that the bars in the cell reflect the desired analysis of the alphanumeric information, and not the other way around.

In contrast, the analyzing step in claim 1 recites, “analyzing a set of graphical data to determine a set of critical factors present in the graphical data”. As a result, the stark contrast between *Berckmans* and the analyzing step as claimed is that *Berckmans* teaches alphanumeric, or textual information, whereas claim 1 recites graphical information. Analysis of numeric data, for example, and analysis of graphical data is not only distinguishable by the nature of the data involved, but also the types of tools and techniques necessary to carry out the analysis. Unless *Berckmans* states that the method and system disclosed in *Berckmans* is equally applicable to graphical data, *Berckmans* does not teach any analysis of graphical data. In fact, *Berckmans* contains no such statement in the entire disclosure. Therefore, *Berckmans* does not teach the analyzing step of claim 1.

Furthermore, because *Berckmans* does not teach analyzing graphical data, *Berckmans* cannot logically teach determination of factors, whether critical or not, pertinent to that graphical data. Therefore, *Berckmans* further fails to teach the purpose of analyzing the graphical data as in claim 1, namely, to determine a set of critical factors present in the graphical data. For this additional reason, *Berckmans* fails to teach the analyzing step of claim 1.

Because *Berckmans* does not teach analyzing graphical data, nor determining a set of critical factors present in the graphical data, *Berckmans* also does not teach ranking of the critical

factors that it does not determine. Therefore, *Berckmans* does not teach the ranking step as recited in claim 1 either. The Examiner cites six out of nine figures from *Berckmans*' disclosure, most of which are component views and details of screen 300. As described above, screen 300 displays alphanumeric information as the core information of interest and supplements the information with bars that reflect the condition of that information. The several views and details of the components of screen 300 in the six figures cited by the Examiner do not contradict this analysis, or add further information to *Berckmans*' disclosure that is not already described above. Therefore, those figures are not reproduced here for sake of brevity. The Examiner further cites following sections of *Berckmans* as teaching the ranking step of claim:

In addition, the simulation control section 310 provides a means of comparing future performances of multiple investments, thus helping the investor choose the best investment. Known investment algorithms, such as the Black-Scholes option pricing model, can predict the trading price of investments when a set of market parameters are provided. The present invention utilizes investment algorithms to determine the performance of investments for theoretical market conditions. Generally, the user selects one or more investment parameters to manipulate while all other parameters are held constant. Investment performance is then simulated by the modeling algorithms and displayed in the investment display section 302. The enable simulation button 900 controls whether data displayed in the investment display section 302 is obtained from simulation calculations or the investment server 210.

Berckmans, col. 8, ll. 50-67.

This section describes the simulation control section 310 of screen 300. By this description, a user can adjust several parameters affecting the performance of a financial instrument to generate simulated data in the display section of screen 300. *Berckmans* teaches that the parameters being adjusted are fed into well known algorithms for computation of the desired information. *Berckmans* gives the example of Black-Scholes model as being one of the algorithms in which the adjusted parameters are input to generate the information that is displayed in display section 302 of screen 300. Not only does this section not teach the ranking step as recited in claim 1, the teachings in this section further bolster the case against any teaching of graphical information being analyzed in the *Berckmans*' disclosure.

Because *Berckmans* teaches that the simulation section produces parameters used in investment algorithms, *Berckmans* teaches simulation of textual parameters, which are consumed

by algorithms to generate textual output. This analysis is supported by the fact that *Berckmans* describes the use of Black-Scholes model as one of the algorithms. Black Scholes model is as follows:

$$C = SN(d_1) - Ke^{-rt}N(d_2)$$

where C is theoretical call premium, a numeric data;

S is current stock price, a numeric data;

t is time until option expiration, a numeric data;

K is option striking price, a numeric data;

r is risk free interest rate, a numeric data;

N is cumulative standard normal distribution, a numeric data;

e is an exponential term of value 2.7183, therefore, a numeric data;

$d_1 = (\ln(S/K) + (r + s^2/2)t) / s\sqrt{t}$ is a numeric computation;

$d_2 = d_1 - s\sqrt{t}$ is a numeric computation;

s is standard deviation of stock returns, a numeric data;

ln is natural logarithm, a numeric computation.

As shown above, Black-Scholes model accepts numeric parameters and generates numeric outputs. *Berckmans* clearly states that the information generated from the simulation is displayed in display section 302 on screen 300. Therefore, *Berckmans* teaches that display section 302 of screen 300, which is the section with pertinent information being compared to the graphical data in the claim, displays numerical data.

Furthermore, one of ordinary skill in the art relevant to *Berckmans*' invention might conceivably replace Black-Scholes model with another financial algorithm to produce similar numeric financial information, but will not replace Black-Scholes model with an algorithm for analyzing graphics from the teachings of *Berckmans*. Therefore, again, the cited section and other portions of *Berckmans* do not teach analyzing graphical data, determining critical factors present in graphical data, or ranking those critical factors. Consequently, *Berckmans* does not teach the ranking step as recited in claim 1.

As described above, *Berckmans* displays textual information whose condition is reflected in the bars that are also displayed. Because textual data leads to graphical data in *Berckmans*, *Berckmans* does teach graphical data leading to textual data. In contrast, the generating step of

claim 1 recites generating a textual description of the set of graphical data, which is the opposite of *Berckmans*' teachings in *Berckmans*' entire disclosure.

The Examiner alleges that *Berckmans*' figure 3 teaches this step. As discussed above, Figure 3 in *Berckmans*, in conjunction with the remainder of *Berckmans*' disclosure, only teaches generating graphical bars from the textual information. Thus, *Berckmans* does not teach the generating step of claim 1. Consequently, Applicants urge the Board to overturn the Examiner's rejection of claims 1, 3, 6-8, 10, 13-15, 17, 20-22, 24-26, and 28-33.

A.2 Claims Group 2 of claims 2, 9, and 16

In addition to their dependence from claims 1, 8, and 15, dependent claims 2, 9, and 16 contain additional features that are not anticipated by *Berckmans*. Claim 2 is representative of all claims in this group and recites:

The method as recited in claim 1, wherein the set of critical factors and the textual description are selected according to a selected mode.

The Examiner rejects this claim stating:

With respect to **dependent claim 2**, *Berckmans* teaches the method as recited wherein the set of critical factors and the textual description are selected according to a selected mode (*Berckmans* column 5, lines 20-30) *Berckmans* teaches other types of securities can be presented with the corresponding information which would change the mode of the device. If the user is looking at stocks it is in one mode and if the user is looking at bonds it is in another.

Final Office Action dated June 21, 2006, p. 4. (Emphasis in the original)

Berckmans does not anticipate the feature "wherein the critical factors and the textual description are selected according to a selected mode" as recited in claim 2. The Examiner cites lines 20-30 from column 5 of *Berckmans*' disclosure. That section of *Berckmans*' disclosure has been quoted and analyzed above, fully with respect to the features of claim 1, and is not quoted again here for brevity. Because *Berckmans* does not primarily pertain to graphical data as described above, *Berckmans* fails to determine critical factors pertaining to graphical data as recited in claim 1.

Therefore, *Berckmans* does not teach in the cited section, or the entire disclosure a method for selection of the critical factors about the graphical data as recited in claim 2.

Therefore, *Berckmans* does not anticipate claim 2 for this additional reason. Consequently, Applicants urge the Board to overturn the Examiner's rejection of claims 2, 9, and 16.

B. GROUND OF REJECTION 2 (Claims 4-5, 11-12, 18-19, and 23)

The Examiner has rejected claims 4-5, 11-12, 18-19, and 23 under 35 U.S.C. § 103(a) as being unpatentable over *Berckmans*, in view of the publication by *W3C et al., Web Content Accessibility Guideline 1.0*, (published May 5, 1999) (hereinafter "*W3C*"). This rejection is respectfully traversed.

The Examiner has rejected claims 4, 11, 18, and 23 stating:

With respect to **dependent claims 4, 11, 18, 23** as indicated in the above-discussion *Berckmans* teaches every element of claims 1, 8 and 15.

Berckmans fails to expressly teach the method wherein said step of generating said textual description further comprises the step of generating said textual rendition in an aural format and using image analysis software for converting the graphical data.

However, *W3C* teaches a process of creating text-equivalents of non-text content that can be rendered in ways that can be presented to a text to speech synthesizer for the purposes of delivering information to users who cannot easily read or see the information in the display. Further *W3C* teaches a process of using analysis software to convert the graphical data (See guideline 12. *W3C* and *Berckmans* are analogous art as they both describe processes for displaying information to a wide variety of users and for coloring information for the user and for presenting information in web browsers.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of *Berckmans* to incorporate the attributes of *W3C* to render graphical data in an aural format. The motivation to perform modification comes from the expressed motivation to provide information to a wide audience that would contain those with disabilities of those that prefer to have content rendered audibly (See *W3C Abstract*).

Final Office Action dated June 21, 2006, pp. 6-7. (Emphasis in original)

B.1 The Combination of Cited References does not Teach all of the Features of Claim 4

The Examiner has failed to state a *prima facie* obviousness rejection because the cited references used in proposed combination do not teach all of the features of claim 4 as believed by the Examiner.

Claim 4 is representative of all claims in the group of claims 4-5, 11-12, 18-19, and 23.

Claim 4 recites:

The method of claim 1 wherein said step of generating said textual description further comprises the step of generating said textual rendition in an aural format.

A *prima facie* case of obviousness is established when the teachings of the prior art itself suggest the claimed subject matter to a person of ordinary skill in the art. *In re Bell*, 991 F.2d 781, 783, 26 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1993). All limitations of the claimed invention must be considered when determining patentability. *In re Lowry*, 32 F.3d 1579, 1582, 32 U.S.P.Q.2d 1031, 1034 (Fed. Cir. 1994). In the case at hand, not all of the features of the claimed invention have been considered, and the teachings of the references themselves do not suggest the claimed subject matter to a person of ordinary skill in the art.

Because claim 4 depends from claim 1, claim 4 contains features similar to those of claim 1. The description above, overcoming *Berckmans*'s alleged anticipation of claim 1, shows that *Berckmans* does not teach or suggest any of the analyzing, ranking, or generating steps with respect to the graphical data as recited in claim 1. In addition, as also shown above, *Berckmans* does not teach, "determine a set of critical factors present in the graphical data" step in claim 1. Similar features are also present in claim 4 by virtue of claim 4's dependence from claim 1, and are not taught or suggested by *Berckmans* by the same reasoning. Therefore, contrary to the Examiner's assertion, *Berckmans* does not teach or suggest all the features of claim 4 except the step of generating said textual rendition in an aural format, for which the Examiner cites to the *W3C* reference.

The Examiner cites to a specific guideline within *W3C* to find teachings or suggestions for the generating an aural format step of claim 4. Even if, *arguendo*, *W3C* teaches everything the Examiner alleges it does with respect to the aural format feature of claim 4, those teachings in *W3C* are moot because *W3C* does not teach or suggest the features that have been shown deficient in *Berckmans*. *W3C* provides:

These guidelines explain how to make *Web Content* accessible to people with disabilities. The guidelines are intended for all *Web content developers* (page authors and site designers) and for developers of *authoring tools*. The primary goal of these guidelines is to promote accessibility. However, following them will also make Web content more available to *all* users, whatever *user agent* they are using (e.g., desktop

browser, voice browser, mobile phone, automobile-based personal computer, etc.) or constraints they may be operating under (e.g., noisy surroundings, under-or over-illuminated rooms, in a hands-free environment, etc.). Following these guidelines will also help people find information on the Web more quickly. These guidelines do not discourage content developers from using images, video, etc., but rather explain how to make multimedia content more accessible to a wide audience.

W3C, Abstract. (Emphasis in the original)

The purpose of *W3C* is to provide guidelines or suggestions about considerations in making web content accessible to individuals with certain disabilities. The publication is broken down into fourteen specific guidelines, each addressing a specific group of web content features that may pose a challenge to individuals with specific disabilities. For example, guideline 1, quoted below, provides suggestions on how to make audio-visual web content more accessible to people with vision or hearing impairments.

Provide content that, when presented to the user, conveys essentially the same function or purpose as auditory or visual content.

Although some people cannot use images, movies, sounds, applets, etc. directly, they may still use pages that include *equivalent* information to the visual or auditory content. The equivalent information must serve the same purpose as the visual or auditory content. Thus, a text equivalent for an image of an upward arrow that links to a table of contents could be "Go to table of contents". In some cases, an equivalent should also describe the appearance of visual content (e.g., for complex charts, billboards, or diagrams) or the sound of auditory content (e.g., for audio samples used in education).

This guideline emphasizes the importance of providing *text equivalents* of non-text content (images, pre-recorded audio, video). The power of text equivalents lies in their capacity to be rendered in ways that are accessible to people from various disability groups using a variety of technologies. Text can be readily output to speech synthesizers and *braille displays*, and can be presented visually (in a variety of sizes) on computer displays and paper. Synthesized speech is critical for individuals who are blind and for many people with the reading difficulties that often accompany cognitive disabilities, learning disabilities, and deafness. Braille is essential for individuals who are both deaf and blind, as well as many individuals whose only sensory disability is blindness. Text displayed visually benefits users who are deaf as well as the majority of Web users.

Providing non-text equivalents (e.g., pictures, videos, and pre-recorded audio) of text is also beneficial to some users, especially nonreaders or people who have difficulty reading. In movies or visual presentations, visual action such as body language or other visual cues may not be accompanied by enough audio information to convey the same

provided, people who cannot see (or look at) the visual content will not be able to perceive it.

Checkpoints:

1.1 Provide a text equivalent for every non-text element (e.g., via "alt", "longdesc", or in element content). *This includes:* images, graphical representations of text (including symbols), image map regions, animations (e.g., animated GIFs), applets and programmatic objects, ascii art, frames, scripts, images used as list bullets, spacers, graphical buttons, sounds (played with or without user interaction), stand-alone audio files, audio tracks of video, and video. [Priority 1]

For example, in HTML:

Use "alt" for the IMG, INPUT, and APPLET elements, or provide a text equivalent in the content of the OBJECT and APPLET elements.

For complex content (e.g., a chart) where the "alt" text does not provide a complete text equivalent, provide an additional description using, for example, "longdesc" with IMG or FRAME, a link inside an OBJECT element, or a description link.

For image maps, either use the "alt" attribute with AREA, or use the MAP element with A elements (and other text) as content.

Refer also to checkpoint 9.1 and checkpoint 13.10.

Techniques for checkpoint 1.1

1.2 Provide redundant text links for each active region of a server-side image map. [Priority 1]

Refer also to checkpoint 1.5 and checkpoint 9.1.

Techniques for checkpoint 1.2

1.3 Until user agents can automatically read aloud the text equivalent of a visual track, provide an auditory description of the important information of the visual track of a multimedia presentation. [Priority 1]

Synchronize the *auditory description* with the audio track as per checkpoint 1.4. Refer to checkpoint 1.1 for information about textual equivalents for visual information.

Techniques for checkpoint 1.3

1.4 For any time-based multimedia presentation (e.g., a movie or animation), synchronize equivalent alternatives (e.g., captions or auditory descriptions of the visual track) with the presentation. [Priority 1]

Techniques for checkpoint 1.4

1.5 Until user agents render text equivalents for client-side image map links, provide redundant text links for each active region of a client-side image map. [Priority 3]

Refer also to checkpoint 1.2 and checkpoint 9.1.

Techniques for checkpoint 1.5

W3C, pp. 9-10. (Emphasis in the original)

In this guideline, W3C suggests providing text equivalents of the audio and visual content that may be embedded in web content. The guideline emphasizes the importance of equivalent

In this guideline, *W3C* suggests providing text equivalents of the audio and visual content that may be embedded in web content. The guideline emphasizes the importance of equivalent information for non-text content so that alternative ways of perceiving the information can be possible for persons with certain disabilities. The purpose of this *W3C* guideline is not to teach the transformation of the web content with audio-visual characteristics into alternative forms, but to suggest considerations in designing the web content with these characteristics, so that the content can be transformed if needed using techniques outside the scope of the *W3C* guideline. Other guidelines in *W3C* are structured similar to guideline 1 described above and also fail to teach or suggest the transformation of content.

Without such a teaching, *W3C* as a whole, in combination with *Berckmans*, fails to teach or suggest the analyzing of graphical data, determining the critical factors present in the graphical data, ranking the critical factors, and generating textual description of graphical data. Each of these steps are manifested in claim 1 and have been shown to be deficient in *Berckmans*. *W3C* does, however, state the following:

The guidelines do not suggest avoiding images as a way to improve accessibility. Instead, they explain that providing a text equivalent of the image will make it accessible.

How does a text equivalent make the image accessible? Both words in "text equivalent" are important:

- Text content can be presented to the user as synthesized speech, braille, and visually-displayed text. Each of these three mechanisms uses a different sense -- ears for synthesized speech, tactile for braille, and eyes for visually-displayed text -- making the information accessible to groups representing a variety of sensory and other disabilities.
- In order to be useful, the text must convey the same function or purpose as the image. For example, consider a text equivalent for a photographic image of the Earth as seen from outer space. If the purpose of the image is mostly that of decoration, then the text "Photograph of the Earth as seen from outer space" might fulfill the necessary function. If the purpose of the photograph is to illustrate specific information about world geography, then the text equivalent should convey that information. If the photograph has been designed to tell the user to select the image (e.g., by clicking on it) for information about the earth, equivalent text would be "Information about the Earth". Thus, if the text conveys the same function or purpose for the user with a disability as the image does for other users, then it can be considered a text equivalent.

W3C, pp. 4-5.

While appearing to be similar in some respects to features of claim 1, this section actually fails to teach or suggest the features of claim 1 described above. Here, *W3C* suggests providing textual equivalent of graphical images. The section describes what textual information may be considered the equivalent of a graphical image and the various forms in which textual content may be presented to the user. Note, however, that the section teaches nothing about a method for analyzing the graphical image. The suggestion in the section is that the provider of the graphical image should consider providing relevant textual information along with the graphical image. The determination of the equivalency of the textual information is left to the content provider.

In contrast, claim 1 is a method in a data processing system for analyzing a graphical data. Absent some teaching or suggestion in *W3C* that a method in a data processing system can analyze a graphical image and generate a textual description of the graphical image based on factors present in the image, *W3C* cannot be extrapolated to teach or suggest the specific features of claim 1. No such teaching or suggestion to this effect is in fact present in the above quoted section or the remainder of *W3C* publication. Therefore, *Berckmans* and *W3C* considered together fail to teach or suggest the various features of claim 1, shown above to be deficient in *Berckmans*.

The Examiner cites guideline 12 as teaching the “generating said textual rendition in an aural format” step of claim 4. Guideline 12 is as follows:

Guideline 12. Provide context and orientation information.

Provide context and orientation information to help users understand complex pages or elements.

Grouping elements and providing contextual information about the relationships between elements can be useful for all users. Complex relationships between parts of a page may be difficult for people with cognitive disabilities and people with visual disabilities to interpret.

Checkpoints:

12.1 Title each frame to facilitate frame identification and navigation.

[Priority 1]

For example, in HTML use the “title” attribute on FRAME elements.

Techniques for checkpoint 12.1

12.2 Describe the purpose of frames and how frames relate to each other if it is not obvious by frame titles alone. [Priority 2]

For example, in HTML, use “longdesc,” or a *description link*.

Techniques for checkpoint 12.2

12.3 Divide large blocks of information into more manageable groups where natural and appropriate. [Priority 2]

For example, in HTML, use OPTGROUP to group OPTION elements inside a SELECT; group form controls with FIELDSET and LEGEND; use nested lists where appropriate; use headings to structure documents, etc. Refer also to guideline 3.

Techniques for checkpoint 12.3

12.4 Associate labels explicitly with their controls. [Priority 2]

For example, in HTML use LABEL and its "for" attribute.

Techniques for checkpoint 12.4

W3C, p. 21. (Emphasis in the original)

In this guideline, W3C provides suggestions on conveying contextual and orientation related information about web content. For example, a web page may contain a control button for changing the behavior of another piece of information contained on the web page. The fact that the control and the changing information are related to each other is readily perceptible to some users, and may not be so readily perceptible to people with certain cognitive disabilities. Guideline 12 cited by the Examiner pertains to improving accessibility to contextual and orientation related information contained on a web page.

Contrary to the Examiner's assertion, any teaching or suggestion of rendering text into audio format is notably absent in this guideline. Such a teaching or suggestion is required for the cited guideline to make obvious the generating step of claim 4. No such teaching or suggestion is in fact present in the section cited by the Examiner. In fact, none of the fourteen guidelines contained in W3C pertain to generating textual rendition in aural format. Guideline 1 quoted and described above remotely pertains to some interrelationships between audio and text content, but even that guideline at best suggests providing text for the audio content, and not vice versa as claim 4 recites. Therefore, Berckmans and W3C considered together fail to teach or suggest the generating step as recited in claim 4. Because claims 11, 18, and 23 contain features similar to those in claim 4, those claims are also not made obvious by the combination of Berckmans and W3C by the same reasoning.

With respect to claims 5, 12, and 19, the Examiner alleges that guideline 5 in W3C teaches generating said textual rendition in a tactile format. Guideline 5 is as follows:

Guideline 5. Create tables that transform gracefully.

Ensure that tables have necessary markup to be transformed by accessible browsers and other user agents.

Tables should be used to mark up truly *tabular information* ("data tables"). Content developers should avoid using them to lay out pages ("layout tables"). Tables for any use also present special problems to users of

screen readers (refer to checkpoint 10.3).

Some *user agents* allow users to navigate among table cells and access header and other table cell information. Unless marked-up properly, these tables will not provide user agents with the appropriate information. (Refer also to guideline 3.)

The following checkpoints will directly benefit people who access a table through auditory means (e.g., a screen reader or an automobile-based personal computer) or who view only a portion of the page at a time (e.g., users with blindness or low vision using speech output or a *braille display*, or other users of devices with small displays, etc.).

Checkpoints:

5.1 For data tables, identify row and column headers. [Priority 1]

For example, in HTML, use TD to identify data cells and TH to identify headers.

Techniques for checkpoint 5.1

5.2 For data tables that have two or more logical levels of row or column headers, use markup to associate data cells and header cells. [Priority 1]
For example, in HTML, use THEAD, TFOOT, and TBODY to group rows, COL and COLGROUP to group columns, and the "axis", "scope", and "headers" attributes, to describe more complex relationships among data.

Techniques for checkpoint 5.2

5.3 Do not use tables for layout unless the table makes sense when linearized. Otherwise, if the table does not make sense, provide an

alternative equivalent (which may be a *linearized version*). [Priority 2]

Note. Once *user agents* support style sheet positioning, tables should not be used for layout. Refer also to checkpoint 3.3.

Techniques for checkpoint 5.3

5.4 If a table is used for layout, do not use any structural markup for the purpose of visual formatting. [Priority 2]

For example, in HTML do not use the TH element to cause the content of a (non-table header) cell to be displayed centered and in bold.

Techniques for checkpoint 5.4

5.5 Provide summaries for tables. [Priority 3]

For example, in HTML, use the "summary" attribute of the TABLE element.

Techniques for checkpoint 5.5

5.6 Provide abbreviations for header labels. [Priority 3]

For example, in HTML, use the "abbr" attribute on the TH element.

Techniques for checkpoint 5.6

Refer also to checkpoint 10.3.

W3C, pp. 13-14. (Emphasis in the original)

This section, *inter alia*, states that a table in a web page should be designed with the consideration of the table's transformability into Braille for Braille displays. The Examiner

hinges the rejection on the tactile nature of the Braille script to find that this guideline teaches generating the Braille display. No such teaching is in fact present in this guideline or the remainder of the *W3C* publication. As described in the above sections, *W3C* contains no teachings or suggestions on generating any of the transformations described in *W3C*. *W3C* only suggests that web content should be designed with the consideration that such transformations may be needed for accessibility to the web content.

Therefore, based on the same reasoning as above, *W3C* in combination with *Berckmans* fails to teach or suggest all of the features of claim 5. Because claims 12 and 19 contain features similar to those in claim 5, those claims are also not made obvious by the combination of *Berckmans* and *W3C* by the same reasoning. Consequently, the Examiner has failed to make a *prima facie* case of obviousness against claims 4-5, 11-12, 18-19, and 23 under 35 U.S.C. § 103(a). Accordingly, Applicants urge the Board to overturn the Examiner's rejection of these claims.

B.2 *Berckmans* and *W3C* are Unrelated to Each Other as a Whole and One of Ordinary Skill in the Art Would Not Make the Suggested Combination to Reach the Inventions in the Claims

One of ordinary skill would not combine the cited references to reach claim 4 because the references are directed towards solving different problems when the cited references are considered as a whole. One of ordinary skill in the art considers the references as a whole, including the problem recognized and teachings provided by the references. It is necessary to consider the reality of the circumstances - in other words, common sense - in deciding which fields a person of ordinary skill would reasonably be expected to look in for a solution to the problem facing the inventor. *In re Oetiker*, 977 F.2d 1443 (Fed. Cir. 1992); *In re Wood*, 599 F.2d 1032, 1036, 202 U.S.P.Q. 171, 174 (CCPA 1979). The cited references do not address the same problems.

In the case at hand, *Berckmans* and *W3C* recognize different problems when considered in their entirety. *Berckmans* is directed towards a system for analyzing performance information about financial instruments. For example, *Berckmans* provides that:

A computer display for analyzing and comparing financial investments.
The display includes an investment display section containing an investment table. The investment table includes a plurality of investment

cells configured to represent a group of investment parameters. The investment cells may contain at least one cell bar having a size proportional to one of the investment parameters. The investment cells may contain a dynamic indicator color, wherein the indicator color changes according to the value of one of the investment parameters. The investment cells may further contain a text descriptive of at least one of the investment parameters.

Berckmans, abstract.

Berckmans pertains to a computer display of information about financial instruments. *Berckmans* provides features and functions for manipulating the displayed information so that the user may gain further insight into the performance of the financial instrument.

W3C, on the other hand provides several guidelines for making web content more accessible for people with disabilities. *W3C* provides support for this description in the abstract of the *W3C* publication that has been quoted and described above in detail. Quotation of the abstract is omitted here for sake of brevity.

The two references address different problems. The only commonality among the two references arises when a user with disabilities might want to use *Berckmans*' display of financial information. In such a case, one of ordinary skill in the art would likely be motivated to combine the two references to reach a system that displays financial information in an alternative form. One of ordinary skill in the art would not, however, be motivated to combine the references to reach the invention of claim 4 which pertains to analysis of graphical data and generating of textual description of the graphical data that is ordered according to critical factors present in the graphical data.

Teachings about almost any two things can be combined to result in some third thing. However, without more, it is improper to conclude that the combination is a specific third thing. In the present case, the Examiner is making a leap that is analogous to this improper conclusion. Regardless of whether the two references are combinable to yield something, the references themselves contain no teaching or motivation to combine one with the other to yield the invention of claim 4.

By similar reasoning, the combination of the references will not be made by one of ordinary skill in the art to reach the inventions of claims 5, 11-12, 18-19, and 23. Consequently, the Examiner has failed to make a *prima facie* case of obviousness against claims 4-5, 11-12, 18-

19, and 23 under 35 U.S.C. § 103(a). Accordingly, Applicants urge the Board to overturn the Examiner's rejection of these claims.

C. GROUND OF REJECTION 3 (Claim 27)

The Examiner has rejected claim 27 under 35 U.S.C. § 103(a) as being unpatentable over *Berckmans*, in view of the knowledge common to those of ordinary skill in the art. This rejection is respectfully traversed.

The Examiner has rejected claim 27 stating:

With respect to **dependent claim 27**, as indicated in the above discussion *Berckmans* teaches every element of claim 8. *Berckmans* does not expressly teach the method wherein the graphical data is selected from a group of GIF, JPEG and PNG data types. However, this limitation would have been obvious to one of ordinary skill in the art at the time of the invention, in view of *Berckmans*, because of the suggestion of using means to deliver in part or in entirety the computing modules that present the information in the browser using CGI scripts, which are known in the art to comprises well known processes of presenting GIF and JPEG information to a browser window.

Final Office Action dated June 21, 2006, pp. 7-8.

C.1 The Combination of Cited References Does Not Teach all of the Features of Claim 27

The Examiner has failed to state a *prima facie* obviousness rejection because the cited references used in proposed combination do not teach all of the features of claim 27 as believed by the Examiner.

Claim 27 recites:

The program product as recited in claim 8, wherein the graphical data is selected from a group of GIF, JPEG, and PNG type data formats.

A *prima facie* case of obviousness is established when the teachings of the prior art itself suggest the claimed subject matter to a person of ordinary skill in the art. *In re Bell*, 991 F.2d 781, 783, 26 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1993). All limitations of the claimed invention must be considered when determining patentability. *In re Lowry*, 32 F.3d 1579, 1582, 32 U.S.P.Q.2d 1031, 1034 (Fed. Cir. 1994). In the case at hand, not all of the features of the claimed invention have been considered and the teachings of the references themselves do not

suggest the claimed subject matter to a person of ordinary skill in the art.

Because claim 27 depends from claim 8, claim 27 contains features similar to those of claim 8. The description above, overcoming *Berckmans*'s alleged anticipation of claim 8, shows that *Berckmans* does not teach or suggest any of the analyzing, ranking, or generating steps with respect to the graphical data as recited in claim 1, and therefore the corresponding features in claim 8. In addition, as also shown above, *Berckmans* does not teach, "determine a set of critical factors present in the graphical data" step in claim 1 and the corresponding feature in claim 8. Similar features are also present in claim 27 by virtue of claim 27's dependence from claim 8, and are not taught or suggested by *Berckmans* by the same reasoning. Therefore, contrary to the Examiner's assertion, *Berckmans* does not teach or suggest all the features of claim 28 except the step of generating said textual rendition in an aural format, for which the Examiner cites to the *W3C* reference.

Further assuming, *arguendo*, the common knowledge alleged by the Examiner is valid in the respects alleged, such common knowledge only teaches the types of graphical data formats. This limited common knowledge is insufficient to fulfill the several deficiencies described in *Berckmans* as to claim 8. Therefore, the combination of *Berckmans* and common knowledge fails to teach or suggest all of the features of claim 27. Consequently, the Examiner has failed to make a *prima facie* case of obviousness against claim 27 under 35 U.S.C. § 103(a). Accordingly, Applicants urge the Board to overturn the Examiner's rejection of this claim.

C.2 The Rejection Is Improper Because the Examiner Has Not Cited Proper References

The Examiner has rejected claim 27 by combining the teachings in *Berckmans* and what the Examiner alleges is common knowledge to one of ordinary skill in the art. The Examiner has provided no concrete support for alleging the contents of said common knowledge of one of ordinary skill in the art.

MPEP § 2144.03(c) in MPEP revision 5 effective August 2006 provides:

If Applicant Challenges a Factual Assertion as Not Properly Officially
Noticed or not Properly Based Upon Common Knowledge, the Examiner
Must Support the Finding With Adequate Evidence.


Furthermore, 37 C.F.R. § 1.104(d)(2) provides:

When a rejection in an application is based on facts within the personal knowledge of an employee of the Office, the data shall be as specific as possible, and the reference must be supported, when called for by the applicant, by the affidavit of such employee, and such affidavit shall be subject to contradiction or explanation by the affidavits of the applicant and other persons.

Applicants/Appellants have shown above that *Berckmans* does not teach or suggest all of the features of the method of independent claim 1, and consequently all of the features of corresponding computer program product of independent claim 8. Because claim 27 depends from claim 8, without more, *Berckmans* also does not teach or suggest all of the features of claim 27.

With this traversal, Appellants respectfully submit that the Examiner has not shown proper support under MPEP § 2144.03(c) for finding that the teachings absent in *Berckmans* are common knowledge to those of ordinary skill in the art. What is common knowledge in one art is not necessarily common knowledge in other arts. Therefore, what a software engineer or a person of comparable ordinary skill in software development art commonly knows in relation to one area of technology does not indicate that the same is known to a person of similar capabilities in another area of technology.

The pertinent art in question with respect to the *Berckmans* reference is not one of software skills pertaining to graphic data analysis but one of software skills pertaining to financial analysis. Without a concrete evidence of common knowledge alleged by the Examiner, or an affidavit by the Examiner as to the Examiner's personal knowledge, the Examiner's assertion of common knowledge is improper under MPEP § 2144.03(c). Consequently, the combination of *Berckmans* and common knowledge proposed by the Examiner is improper to reject claim 27 under 35 U.S.C. § 103(a).


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CLAIMS APPENDIX

The text of the claims involved in the appeal reads:

1. A method in a data processing system for presenting graphical data to a user, comprising the steps of:

analyzing a set of graphical data to determine a set of critical factors present in the graphical data to form determined critical factors;

ranking the determined critical factors according to respective priorities set for each of the critical factors; and

generating a textual description of the set of graphical data, ordered according to the priorities of each of the respective critical factors.

2. The method as recited in claim 1, wherein the set of critical factors and the textual description are selected according to a selected mode.
3. The method as recited in claim 2, wherein the mode is selected according to a URL associated with the set of graphical data.
4. The method of claim 1 wherein said step of generating said textual description further comprises the step of generating said textual rendition in an aural format.
5. The method of claim 1 wherein said step of generating said textual description further comprises the step of generating said textual rendition in a tactile format.

6. The method of claim 2 wherein said priorities of each of the respective critical factors is determined in accordance with said selected mode.

7. The method of claim 1 wherein said step of generating said textual description of the set of graphical data includes generating said textual description in accordance with one or more textual templates.

8. A computer program product embodied in a tangible storage medium, the program product for presenting graphical data, the program product including a program of instructions for performing the steps of:

analyzing a set of graphical data to determine a set of critical factors present in the graphical data to form determined critical factors;

ranking the determined critical factors according to respective priorities set for each of the critical factors; and

generating a textual description of the set of graphical data, ordered according to the priorities of each of the respective critical factors.

9. The program product of claim 8 wherein the set of critical factors and the textual description are selected according to a selected mode.

10. The program product of claim 9 wherein the mode is selected according to a URL associated with the set of graphical data.

11. The program product of claim 8 wherein said program of instruction for performing the step of generating said textual description further comprises a program of instruction for performing the step of generating said textual description in an aural format.

12. The program product of claim 8 said program of instruction for performing the step of generating said textual description comprises a program of instruction for performing the step of generating said textual description in a tactile format.

13. The program product of claim 9 wherein said priorities of each of the respective critical factors is determined in accordance with said selected mode.

14. The program product of claim 8 wherein said step of generating said textual description of the set of graphical data includes generating said textual description in accordance with one or more textual templates.

15. A data processing system comprising:

circuitry operable for analyzing a set of graphical data to determine a set of critical factors present in the graphical data to form determined critical factors;

circuitry operable for ranking the determined critical factors according to respective priorities set for each of the critical factors; and

circuitry operable for generating a textual description of the set of graphical data, ordered according to the priorities of each of the respective critical factors.

16. The system as recited in claim 15, wherein the set of critical factors and the textual description are selected according to a selected mode.

17. The system as recited in claim 16, wherein the mode is selected according to a URL associated with the set of graphical data.
18. The system of claim 15 wherein said circuitry operable for generating said textual description further comprises circuitry operable for generating said textual rendition in an aural format.
19. The system of claim 15 wherein said circuitry operable for generating said textual description further comprises circuitry operable for generating said textual rendition in a tactile format.
20. The system of claim 16 wherein said priorities of each of the respective critical factors is determined in accordance with said selected mode.
21. The system of claim 15 wherein said circuitry operable for generating said textual description of the set of graphical data includes circuitry operable for generating said textual description in accordance with one or more textual templates.
22. The method as recited in claim 1, wherein the graphical data further comprises data in a format that produces a non-textual image on a display screen.
23. The method as recited in claim 22, wherein the generating step uses image analysis software for converting the graphical data into a textual description of the graphical data.

24. The program product of claim 8, wherein the graphical data further comprises data in a format that produces a non-textual image on a display screen.
25. The system as recited in claim 15, wherein the graphical data further comprises data in a format that produces a non-textual image on a display screen.
26. The system as recited in claim 15, wherein the graphical data further comprises data in a format that produces a predominately non-textual image on a display screen.
27. The program product as recited in claim 8, wherein the graphical data is selected from a group of GIF, JPEG, and PNG type data formats.
28. The method as recited in claim 1, wherein the set of critical factors includes characteristics of data illustrated in a displayed multi-dimensional graph.
29. The computer program product as recited in claim 8, wherein the set of critical factors includes characteristics of data illustrated in a displayed multi-dimensional graph.
30. The system as recited in claim 15, wherein the set of critical factors includes characteristics of data illustrated in a displayed multi-dimensional graph.
31. The method as recited in claim 1, wherein the textual description of the set of graphical data describes in words an illustrated description of the graphical data.
32. The computer program product as recited in claim 8, wherein the textual description of the set of graphical data describes in words an illustrated description of the graphical data.

33. The system as recited in claim 15, wherein the textual description of the set of graphical data describes in words an illustrated description of the graphical data.

EVIDENCE APPENDIX

There is no evidence to be presented.

RELATED PROCEEDINGS APPENDIX

No decision has been rendered by the Board in the related appeal that is pending and is now re-instated.